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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/641,685	08/18/2000	Thomas Theodore Mabry	0918.0064C	7079

7590 12/19/2002

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EXAMINER

BERCK, KENNETH A

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/641,685

Applicant(s)

MABRY, THOMAS THEODORE

Examiner

Ken A Berck

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Amendment A, filed Sep 23, 2002, has been entered.

Amendment A overcomes claim rejections under 35 USC 102/103.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4-6 and 9-12<sup>14</sup> are rejected under 35 U.S.C. 102(b) as being anticipated by Flanary et al. (US 5,404,072).

Flanary discloses (fig 2) an image intensifier tube with a housing which holds a photocathode, a screen and a microchannel plate, wherein a support for the microchannel plate comprises a longitudinally extending cylindrical collar (100) in the housing having longitudinally extending interior and exterior cylindrical surfaces, the interior cylindrical surfaces but not the exterior cylindrical surface having a cylindrical recess indented therein with interior cylindrical portions on both sides of the recess and the microchannel plate is held in the recess, with an annular shaped base which extends radially from the external cylindrical surface.

Regarding claim 13, Flanary discloses the longitudinally extending cylindrical collar has first and second ends and the base extends from the collar at a first end and the cylindrical recess is present near the second end.

Regarding claim 14, Flanary discloses the totality of the length of the interior cylindrical portions on both sides of the recess is substantially greater than the thickness of the microchannel plate.

Regarding claim 4, Flanary discloses the collar is supported in the housing by at least a peripheral retention member.

Regarding claim 5, Flanary discloses a platform on which the base of the collar is secured, a second cylindrical member which is perpendicular to the platform and concentric with the first cylindrical member of the collar and an annular flange at the end of the second cylindrical member which extends in a direction away from the platform.

Regarding claim 6, Flanary discloses the peripheral retention member is secured to the tube housing by the annular flange.

Regarding claim 9, Flanary discloses the collar is further supported in the housing by an output contact support member (110) located near the periphery of the microchannel plate on which the bottom of the microchannel plate rests.

Regarding claim 10, Flanary discloses the output contact support member has a first surface parallel to the microchannel plate on which the bottom of the microchannel plate rests, a second portion perpendicular to the first surface which extends in a direction away from the microchannel plate, and a third portion parallel to the first surface which extends towards the outside of the tube.

Regarding claim 11, Flanary discloses a ceramic ring between the flange of the peripheral retention member and the third portion of the output contact support member.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanary et al. (US 5,404,072).

Flanary discloses the above claim limitations as well as using a weld as a securing means, but fails to clearly point out using a weld or locking tabs to secure the collar.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to choose the most appropriate known securing means since it would be within the general skill of a worker in the art to select a securing means on the basis of its suitability for the intended use.

### ***Response to Arguments***

Applicant's arguments with respect to claims 4-11 have been considered but are moot in view of the new ground(s) of rejection.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken A Berck whose telephone number is (703)305-7984. The examiner can normally be reached on Mon-Fri 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (703)305-4794. The fax phone numbers


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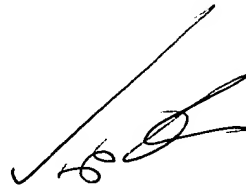
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for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

kab   
December 15, 2002

  
Vip Patel  
Primary Examiner  
Art Unit 2879